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3. All of the equipment in the new foundry was to be US, primarily Osborne. The most familiar equipment in the foundry field in the USSR was Osborne 275 GP Squeezers, and 405 Molding Machines. 25X1

4. All blueprints for the rebuilding of the Zis auto foundry were of US origin.

5. In this operation most of the equipment was of German origin. The sand mixers were one hundred per cent German and the molding machines were Hermann, and Badischemachinesch of Germany. 25X1

6. There was some Tabor equipment from the US, and some Osborne (US) squeezers. The cupolas were Whiting, (US), and had a capacity of 10-12 tons per hour.

7. any equipment in either plant originating in the USSR with the exception of some steel flasks which were made in Krasnodar. The steel flasks from Krasnodar were defective to a high degree, and in 1940 was assigned to visit the plant producing the flasks in Krasnodar to check on the reasons for the extremely poor quality. 25X1 25X1 25X1

8. these flasks originated in a small foundry which employed about three or four hundred people. 25X1

9. The flasks had the characteristic of shrinking and breaking when lifted. Although steel should not break, the steel used in these Krasnodar flasks broke when hit them with a sledge hammer. I broke 20 consecutive flasks in this fashion before the management was convinced that something was wrong. 25X1

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25 YEAR RE-REVIEW

10. The Stankolit works in Moscow had five separate foundries which ranged in size from very small to very large operations. For example, one of these foundries produced huge tubes for the Moscow subway.

11. [redacted] Department of Small Moldings [redacted] equipment c[redacted] 25X1 25X1 sisted of one Hermann, one Tabor, and 12 Badischemachinesch molding machines.

12. One of the other sections had one sand slinger [redacted] was of German origin. 25X1

13. Of the two shops [redacted] Zis and Stankolit, it could be said that 25X1 Zis was primarily designed in accordance with US influence and Stankolit was German influence.

14. There was one Simpson-type muller in use in the old Zis plant and there were three or four mullers in the Stankolit works. [redacted] probably 25X1 80 % [redacted] of the Simpson type mullers used in the entire USSR were based on US designs and 20% were based on German designs.

15. As far as molding machines were concerned the modernized Zis works was one hundred per cent US equipped. Stankolit on the other hand was 75 % German equipped. For the country as a whole [redacted] the molding 25X1 machines were approximately 50% [redacted] US origin, and 50 % German origin.

16. As concerns sand slingers [redacted] with the exception 25X1 of those mentioned earlier. There was one sand slinger in the Zis works [redacted] 25X1 [redacted] and one sand slinger in the Stankolit foundry [redacted] 25X1 [redacted] was German origin. 25X1

17. As far as knockout machinery is concerned, such equipment was practically unknown in the USSR. For example in the Stankolit works there were no shake-out ma- 25X1 chines and there was only one vibrator in the Stankolit works. We used sledge hammers as knockout machines [redacted] this would be generally true through- 25X1 out the USSR.

18. Although most plants used sledge hammers in place of knockout machines, from 1936 on there was a trend to equip foundries in the USSR with equipment which was the last word in modernity [redacted] 25X1 [redacted] 25X1

19. As concerns sand conveyer systems in the Zis works, they were one hundred percent US origin but in the Stankolit works the sand conveyer system was one hundred per cent German.

20. The Gorki Foundry which was a copy of the Ford Motor Foundry of the US was one hundred per cent US.

21. At Stankolit there were two kinds of conveyer systems both of which were of the horizontal type. As far as replacement of spare parts was concerned there was a special shop which specialized in maintenance. This shop had an engineer who was concerned only with repairing of equipment such as Simpson mullers.

22. On other parts it was required to obtain permission to spend "valuable money" such as US dollars or German marks for spare parts. We ordered and received some spare parts for molding machines but it required weeks and sometimes months to get permission to spend valuable money.

22. On one occasion we had a part of some Hermann equipment break. The piece that broke was a turning arm. We plugged the hole and made a casting and machined and made a replacement part before the real replacement arrived from the Hermann plant. We improvised a replacement part in 24 hours. It took a month to receive the actual replacement part from Germany.

23. When equipment broke down however, we usually cannibalized parts from other broken machines. However, in order to avoid trouble we usually ordered spare parts well in advance as we were afraid of breakdowns which would disrupt progress. We had a few problems of replacement of ball or roller bearings as there was a large SKF plant in Moscow, and we could get bearings from this plant.

24. In conclusion, [redacted] foundries which produced parts for automobiles, tractors, street cars, and locomotives. [redacted] practically no equipment of USSR origin. [redacted] it had been copied directly from US, or German prototypes. 25X1 25X1 25X1

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